

Abstract

A flow control structure is provided for the selective control of a liquid flow from an external body of liquid or for liquid and/or solid separation. The flow control structure includes a container, a float, and a valve. The container has an inlet, an outlet, and a closed bottom surface. The float is buoyantly positioned within the container and rises and falls in response to the level of liquid in the container. A valve is positioned inside the container and is coupled to the float by a linkage so that the valve opens when the float rises above a preselected height and the valve closes when the float falls to the preselected height within the container. The length of the linkage between the valve and the float determines the height of liquid required to open the valve. The valve may be positioned at an angle relative to the horizontal.